Project Specification Examples

Distribution

A-E Firms

A-E Negotiator

Contracting Officer

Designer

RFP Contractors

Specification Writer

Specification Engineer

Ownership

The *Specification Engineer [mailto:Garry.L.Hill@usace.army.mil?Subject=REFP04L0-Project Specification Examples]* is responsible for ensuring that this document is necessary and that it reflects actual practice.

Examples

Examples are provided for the following:

Example: Corrected Final Specification (100% Submittal)

4 Digit Spec. No.

SECTION TABLE OF CONTENTS

DIVISION 13 - SPECIAL CONSTRUCTION

SECTION 13852A

FIRE ALARM REPORTING SYSTEM, RADIO TYPE

-- End of Section Table of Contents --

 Content written by USACE, Sacramento District, Engineering Division

4 digit Spec No.

SECTION 13852A

FIRE ALARM REPORTING SYSTEM, RADIO TYPE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI C135.30	(1988) Zinc-Coated Ferrous Ground Rods for Overhead or Underground Line Construction

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

47 CFR 15	Radio Frequency Devices

ELECTRONIC INDUSTRIES ALLIANCE (EIA)

EIA ANSI/TIA/EIA-222-F	(1996) Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C62.41	(1991; R 1995) Surge Voltages in Low-Voltage AC Power Circuits

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA ICS 1	(1993) Industrial Control and Systems

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(1999) National Electrical Code
NFPA 72	(1996; Errata Oct 96, Dec 96; TIA 96-1, 96-2, 96-3) National Fire Alarm Code
NFPA 780	(1997) Installation of Lightning Protection Systems

UNDERWRITERS LABORATORIES (UL)

UL 6	(1997) Rigid Metal Conduit
UL 467	(1993; Rev thru Apr 1999) Grounding and Bonding Equipment

4 Digit Spec. No.

UL 797 (1993; Rev thru Mar 1997) Electrical Metallic Tubing

PART 2 PRODUCTS

2.1 RADIO FIRE ALARM TRANSMITTER (TRANSCEIVER)
Radio Fire Alarm Transmitter (Transceiver) shall be compatible with the Radio Fire Alarm Monitoring Base Station. The Yuma Proving Ground Fire Department utilizes a Monaco D-500 Central Receiving System. Therefore, provide a Monaco Enterprises, Inc. Transceiver Model number BT2-3, 5 zones. Additionally, provide the model numbers of the antenna system and other accessories by Monaco, as indicated on contract drawing sheet E4.02

2.1.1 Frequency Allocation
The transmitters shall operate on a frequency of 60 MHz.

2.1.2 Power Requirements
Transmitters shall be powered by a combination of locally available 120 Vac, and sealed nickel-cadium type batteries requiring no additional water. In the event of loss of 120 Vac power, the transmitter shall automatically switch to battery operation. The switchover shall be accomplished with no interruption of protective service, without adversely affecting the battery-powered capabilities, and shall cause the transmission of a trouble message in no less than seconds. Upon restoration of ac power, transfer back to normal ac power supply shall be automatic and the battery shall be recharged. The converter/battery charger shall be installed within the transmitter housing. Power supply transient filtering shall be provided.

2.1.2.1 Battery Power

The battery package shall be capable of supplying all the power requirements for a given transmitter.

PART 3 EXECUTION

3.1 INSTALLATION

All work shall be installed as shown and in accordance with the manufacturer's recommendations, unless otherwise specified. Necessary interconnections, services, and adjustments required for a complete and operational system shall be provided. Electrical work shall be in accordance with NFPA 70.

-- End of Section --

13852A - 3

Example: Specification Amendment

4 digit Spec No.

SECTION TABLE OF CONTENTS

SECTION 13852A

FIRE ALARM REPORTING SYSTEM, RADIO TYPE

-- End of Section Table of Contents --

4 Digit Spec. No.

SECTION 13852A

FIRE ALARM REPORTING SYSTEM, RADIO TYPE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI C135.30	(1988) Zinc-Coated Ferrous Ground Rods for Overhead or Underground Line Construction

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

47 CFR 15	Radio Frequency Devices

ELECTRONIC INDUSTRIES ALLIANCE (EIA)

EIA ANSI/TIA/EIA-222-F	(1996) Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C62.41	(1991; R 1995) Surge Voltages in Low-Voltage AC Power Circuits

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA ICS 1	(1993) Industrial Control and Systems

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70	(1999) National Electrical Code
~~NFPA 72~~	~~(1996; Errata Oct 96, Dec 96; TIA 96-1, 96-2, 96-3) National Fire Alarm Code~~
~~NFPA 780~~	~~(1997) Installation of Lightning Protection Systems~~ **(Typical - Strike Out for Deleted Items)**

UNDERWRITERS LABORATORIES (UL)

UL 6	(1997) Rigid Metal Conduit
UL 467	(1993; Rev thru Apr 1999) Grounding and Bonding Equipment
UL 797	(1993; Rev thru Mar 1997) Electrical Metallic Tubing
UL 1242	***(1996; Rev Mar 1998) Intermediate Metal Conduit*** **(Typical - Bold and Italic for New Items)**

4 Digit Spec. No.

1.2 GENERAL REQUIREMENTS **(Typical - Bold and Italic for New Items)**

PART 2 PRODUCTS

2.1 RADIO FIRE ALARM TRANSMITTER (TRANSCEIVER)

Radio Fire Alarm Transmitter (Transceiver) shall be compatible with the Radio Fire Alarm Monitoring Base Station. The Yuma Proving Ground Fire Department utilizes a Monaco D-500 Central Receiving System. Therefore, provide a Monaco Enterprises, Inc. Transceiver Model number BT2-3, 5 zones. Additionally, provide the model numbers of the antenna system and other accessories by Monaco, as indicated on contract drawing sheet E4.02

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2.1.2.1 Battery Power

The battery package shall be capable of supplying all the power requirements for a given transmitter.

PART 3 EXECUTION

3.1 INSTALLATION

All work shall be installed as shown and in accordance with the manufacturer's recommendations, unless otherwise specified. Necessary interconnections, services, and adjustments required for a complete and operational system shall be provided. ~~Electrical work shall be in accordance with NFPA 70.~~ **(Typical - Strike Out for Deleted Item)**

-- End of Section --

Example: Pricing Schedule - Military Construction Project

4 Digit Spec. No.

PRICING SCHEDULE

CONTRACTOR SHALL FURNISH ALL PLANT, LABOR, MATERIAL, EQUIPMENT, ETC. NECESSARY TO PERFORM ALL WORK IN STRICT ACCORDANCE WITH THE TERMS AND CONDITIONS SET FORTH IN THE CONTRACT TO INCLUDE ALL ATTACHMENTS THERETO.

LINE ITEM NO.	DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	TOTAL PRICE
0001	Construct an Active Bulk Warehouse to the 2 meter Building Line, Complete. (Except Option Items Listed Below.) $_____	1	JOB	LUMP SUM	
0002	Construct all Utilities, Outside the 2 meter Building (Except Option Items Listed Below) $_____	1	JOB	LUMP SUM	
0003	Demolition of Existing Warehouses 8 and 9. $_____	1	JOB	LUMP SUM	

BASE PRICE

$_____

(TOTAL OF LINE ITEMS 0001 THRU 0003)

OPTIONS

0004	Assemble Building 47 at New Location.(To Include Concrete Foundation.) $_____	1	JOB	LUMP SUM	

TOTAL PRICE $_____

(BASE PRICE PLUS OPTION ITEM)

Example: Pricing Schedule - Civil Works Construction Project

4 Digit Spec. No.

PRICING SCHEDULE

CONTRACTOR SHALL FURNISH ALL PLANT, LABOR, MATERIAL, EQUIPMENT, ETC. NECESSARY TO PERFORM ALL WORK IN STRICT ACCORDANCE WITH THE TERMS AND CONDITIONS SET FORTH IN THE CONTRACT TO INCLUDE ALL ATTACHMENTS THERETO.

LINE ITEM NO.	DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	TOTAL PRICE
0001	PREPARATORY WORK AND SITE CLEANUP	1	JOB	LUMP SUM	$_____
0002	CLEARING AND GRUBBING	1	JOB	LUMP SUM	$_____
0003	EMBANKMENT FILL	157,100*	CY	$_____	$_____
0004	RELIEF WELL	19	EA	$_____	$_____
0005	GEOTEXTILE				
0005AA	STABILITY BERM/ SEEPAGE BERM	47,700*	SY	$_____	$_____
0005AB	GEOTEXTILE	67,300*	SY	$_____	$_____
0005AC	GEOTEXTILE	16,500*	SY	$_____	$_____
0006	EXCAVATION	4,000*	CY	$_____	$_____
0007	ROCK RIPRAP				
0007AA	24" DIA. DITCH BANK (2' THICKNESS)	8	TON	$_____	$_____
0012	MANHOLE	1	EA	$_____	$_____
0013	8" DIA. SCREEN CAP	1	EA	$_____	$_____
0014	AGGGREGATE BASE (MAINTENACE ROAD)	940*	TON	$_____	$_____
			TOTAL ESTIMATED PRICE		$_____

* QUANTITY IS AN ESTIMATED AMOUNT - SEE SECTION 00700 - FAR 52.211-18 - FOR VARIATION